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ABSTRACT

Examined were the effects of high expectancy and non-expectancy conditions on the verbal behavior of 12 moderately and mildly retarded children (3-16 years old). Six experimental Ss were exposed to a condition in which experimenters expressed expectation of achievement on the Children's Apperception Test. Comparisons of verbalization revealed significantly more words, longer vocalizations, and fewer seconds prior to initial vocalization for experimental Ss than for control Ss. (CL)

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EFFECTS OF EXPECTANCY ON VERBAL BEHAVIOR OF MENTALLY RETARDED CHILDREN

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Concern has been expressed over the effects of expectancy on the learning and level of performance of children, mentally deficient and normal (Mann, 1960; Dunn, 1968; Entwisle, Cornell, & Epstein, 1972; Heintz, 1974; MacMillan, Jones, & Aloia, 1974; Rappaport & Rappaport, 1975), and culturally deprived (Hamblin & Buckholdt, 1967; Lenkowsky & Blackman, 1968; Clark, 1969).

Experimenters generally agree with regard to the effects of expectancy on the learner. Rosenthal and Jacobsen (1968) stated "People more often than not, do what is expected of them" (p. vii). Similar findings were reported by Foster, Ysseldyke, and Reese (1975) who stated "teacher expectancy concerning a given child is created . . . then transferred to the pupil who, in turn, behaves in ways consistent with the expectancy" (p. 470). In addition, Jones (1972) felt "expectations about performance of children can come to serve a self-fulfilling prophecy" (p. 558).

Although many studies have applied the expectancy concept and social conditions to the acquisition of verbal behavior (Weisberg, 1963; Schlanger, 1966; Hamblin & Buckholdt, 1967; Michael, 1967; Schiefelbusch, 1967) these studies have not included the expectancy conditions with regard to retarded children.

The purpose of this study was to examine the effects of high expectancy and non-expectancy conditions on verbal behavior of retarded children. The non-expectancy condition was used as a control group to test the effects of the expectancy condition. Subjects in the experimental group were exposed to an expectancy condition by the experimenter. It was believed that those children exposed to the high expectancy condition would exhibit an increase in verbal behavior, or responses.

The null hypothesis was that there were no significant differences between the experimental and control groups in the amount of verbal responses emitted by the subjects.

METHOD

Subjects

Twelve retarded children participated in the study. The subjects IQ's ranged from 40 - 84, mean IQ being 53. Chronological ages ranged from 3.0 to 16.0 years, the mean C.A. was 12.9 years. All subjects were identified by the administrator or principal as being non-verbal. Subjects were selected equally with regard to sex and ethnic groups. Controls were also employed for physical disabilities that may account for impairment of vocal ability.

Six subjects were randomly assigned to the experimental group (intervention -- high expectancy) and six were randomly assigned to the control group (no intervention -- non-expectancy).

A secondary experimenter was employed to randomly assign the subjects to the experimental and control groups to avoid experimenter bias.

Materials

The Children's Apperception Test (CAT) cards were used for the pre- and posttests, and were chosen as the stimuli used to elicit stories from the subjects. Three CAT cards were randomly selected from the ten CAT cards which picture animals in a variety of activities.

Procedure

All subjects were given a pre- and posttest. The experimental group was exposed to an intervention phase, on an individual basis. The subjects' responses were tape recorded and timed with a stopwatch.

Upon entering the experimental room, the tape recorder was turned on, and the subject was told, "We're going to look at some pictures, and I want you to tell me a story about each picture."

Pretests and Posttests

The subjects were allowed 45 seconds for an initial response to each picture. If no response was obtained in that 45 seconds, the next picture was presented to the subject.

If any type of verbal response was made to any picture, 90 seconds were then allowed for any further responses to be made.

Upon completion of the third stimulus picture the session was ended.

The subjects were given no prompting or reinforcement during this session.

Intervention

Intervention was conducted for two, ½ hour sessions, totaling 1 hour, for each subject in the experimental group.

Subjects were provided with paper, crayons, pencils, blocks, clay, and a self-erasable drawing toy. They could choose any or all of the materials provided for them. Verbal prompting for verbal responses and social reinforcement for any type of verbal response was given.

The experimenter talked to the subject, and specifically expressed during the session that the subject was expected to make verbal responses, to communicate verbally.

Data Gathering

Each child was identified by a number, assigned to them during selection.

The number of words spoken by both groups during pre- and posttests was evaluated by two independent experimenters from the tape recordings and compared.

In addition, the number of seconds that had elapsed before the first response, and the length of time, in seconds, of any audible vocalization, by both groups in the pre- and posttesting, was recorded and compared, in the same manner as stated previously.

Data Processing and Analysis

Comparisons were made regarding; number of words spoken, total number of seconds elapsed (if no response was made, 135 seconds were recorded), and the total length of audible vocalization.

RESULTS

Two-tailed t-tests and analysis of covariance were performed to determine any significant differences between the groups.

According to the t-test results, significance was found at the .05 level ($t = 3.51$) between pre- and posttests of the experimental and control groups in the number of words spoken.

The analysis of covariance was performed to test the significance of the difference of the posttest means using the pretest as a covariate. Table 1 presents the total number of seconds elapsed prior to emitting a response between experimental and control groups, which indicates significance ($F = 5.61$). In addition, the analysis of covariance between experimental and control groups in length of audible vocalizations (Table 2) yielded a significant difference ($F = 5.40$, $p < .05$).

The inter-rater reliability of the data gathered by the two independent experimenters from the tape-recorded pre- and posttests was .95.

DISCUSSION

The purpose of this study was to compare the amount of difference between subjects who received intervention (expectancy), in other words, those who were exposed to a situation in which an attitude of expecting achievement on a task was held and expressed, and those subjects who did not receive intervention (non-expectancy).

On the basis of the experimental findings regarding the number of words spoken, the number of seconds elapsed, and the length of audible vocalization, the null hypothesis was rejected.

Table 1

Summary of Analysis of Covariance between Experimental and Control Groups in Total Number of Seconds Elapsed

Source of variation	SS	df	MS	F
Among	15,361.52	9	1,706.84	5.61*
Within	9,569.46	1	9,569.46	
Total	24,930.98			

*$p < .05$.

Table 2

Summary of Analysis of Covariance between Experimental and Control Groups in Length of Audible Vocalization

Source of variation	SS	df	MS	F
Among	577.40	9	64.16	5.40*
Within	346.75	1	346.75	
Total	924.15			

*$p < .05$.

There was a significant difference found between the experimental and control groups in the amount of words spoken, that is, the experimental group uttered significantly more words than the control group. In addition, significant differences were also found with regard to the length of audible vocalizations, which was expected to increase. Pertaining to the number of seconds elapsed, a significant difference was also found: the number of seconds elapsed prior to initial vocalization decreased significantly in the experimental group.

The significance of these comparisons indicated that there was indeed a difference between the experimental and control groups. It is highly likely that this difference was due to the high expectancy condition present during intervention. Therefore, expectancy did in fact effect the verbal behavior of the children in this study. It can be concluded that children who are capable, and given the opportunity and encouragement, will perform.

Recommendations made on the basis of the present study were:

1. Works with the subjects should also include attempts to increase attending skills, and attempts to decrease inappropriate self-stimulation and other maladaptive behaviors.
2. The time of intervention should be increased.
3. Sign training would be a beneficial adjunct to speech training.

Follow-up recommendations to the study include:

1. Work with teachers and workers, parents/guardians and siblings, and any others who would spend a good deal of time with the child, regarding the purpose of this study and results, and suggestions for their continued interactions with the child, since results have shown improvement with an increased attitude of expectancy.
2. Groups of children could be worked with using the procedures for expectancy, combined with positive reinforcement for both speech and speech approximations, and for the attention to other's speech, which would also be acting as a positive reinforcement for the child's making verbal attempts and for attention to the environment.

REFERENCES

Clark, K.B. Learning obstacles among children. In A.L. Roaden (Ed.), Problems of school men in depressed urban centers. Columbus, Ohio: College of Education, Ohio State University, 1969.

Dunn, L.M. Special education for the mildly retarded -- Is much of it justifiable? Exceptional Children, 1968, 35, 5-22.

Entwisle, D.R., Cornell, E., & Epstein, J. Effect of a principal's expectations on test performance of elementary school children. Psychological Reports, 1972, 31, 551-556.

Foster, G.G., Ysseldyke, J.E., & Reese, J.H. I wouldn't have seen it if I hadn't believed it. Exceptional Children, 1975, 41(7), 469-473.

Hamblin, R.L., & Buckholdt, D. Structured exchange and childhood learning: Ghetto children. Washington, D.C.: Office of Education (DHEW), 1967. (ERIC Document Reproduction Service No. ED 035 141)

Heintz, P. Teacher expectancy for academic achievement of mentally retarded pupils. Mental Retardation, 1974, 12(3), 24-27.

Jones, R.L. Labels and stigma in special education. Exceptional Children, 1972, 38, 553-564.

Lenkowsky, R.S., & Blackman, L.S. The effect of teachers' knowledge of race and social class on their judgments of children's academic competence and social acceptability. Mental Retardation, 1968, 6(6), 15-17.

MacMillan, D.L., Jones, R.L., & Aloia, G.F. The mentally retarded label: A theoretical analysis and review of research. American Journal of Mental Deficiency, 1974, 79(3), 241-261.

Mann, M. What does ability grouping do to the self-concept? Childhood Education, 1960, 36, 357-360.

Michael, J. The relevance of animal research. In R.L Schiefelbusch, R.H. Copeland, & J.O. Smith (eds.), Language and mental retardation: Empirical and conceptual considerations. New York: Holt, Rinehart, & Winston, 1967

Rappaport, M.M., & Rappaport, H. The other half of the expectancy equation: Pygmalion. Journal of Educational Psychology, 1975 67(4), 531-536.

Rosenthal, R., & Jacobsen, L. Pygmalion in the classroom. New York: Holt, Rinehart & Winston, 1968.

Schiefelbusch, R.L. The development of communication skills. In R.L. Schiefelbusch, E.H. Coeland, & J.O. Smith (Eds.), Language and mental retardation: Empirical and conceptual considerations. New York: Holt, Rinehart & Winston, 1967.

Schlanger, B.B. Environmental influences on the verbal output of mentally retarded children. In T.E. Jordan (Ed.), Perspectives in mental retardation. Carbondale: Southern Illinois University Press, 1966.

Weisberg. R. Social and non-social conditioning of infant vocalizations. Child Development, 1963, 34, 377-388.